

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 03-095145

(43)Date of publication of application : 19.04.1991

(51)Int.Cl.

C07C229/02
C07C227/12
C07C319/20
C07C323/58
// B01J 21/06
B01J 23/20
C07B 61/00

(21)Application number : 01-234378

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(22)Date of filing : 08.09.1989

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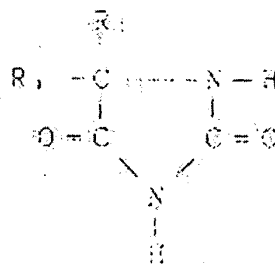
(54) PRODUCTION OF ALPHA-AMINO ACID

(57)Abstract:

PURPOSE: To produce an α -amino acid by hydrolyzing hydantoin in contact with water in a liquid phase using a highly active catalyst consisting of at least one metal oxide selected from a group of zirconium oxide, titanium oxide and niobium oxide.

CONSTITUTION: Hydantoin [e.g. 5-(β -methylthioethyl)-hydantoin] expressed by the formula (R1 and R2 are H, alkyl, substituted alkyl, cyclohexyl, phenyl or substituted phenyl) is hydrolyzed by bringing the hydantoin into contact with water in a liquid phase using at least one metal oxide selected from a group consisting of zirconium oxide, titanium oxide and niobium oxide as a catalyst to provide the α -amino acid (e.g. methionine).

The α -amino acid is useful as a food, feed and medicine and an intermediate for agricultural chemical, medicine and high polymer. According to the



above-mentioned method, the objective compound can be obtained under mild conditions in high yield. Moreover, the method is economical, since the above-mentioned reaction and aftertreatment can be carried out without using water-soluble acid or alkali.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]